Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-7 (Canceled).

Claim 8 (Currently Amended): An apparatus for forming image forming data ~~to be reproduced~~, comprising:

a neuronal ~~net~~ nets spatially coupling pixel values of different color channels of image data to be reproduced, implemented on a predetermined circuit, ~~and~~ comprising parameters established by a learning process on the basis of a test image of predetermined quality,

image inputting means feeding N² neuronal nets for N color channels, ~~the~~ with output ~~neurons~~ of the neuronal ~~net~~ nets being added and connected to ~~the~~ inputs of ~~the picture elements~~ ~~of~~ an image reproduction device;

a storage for image data to be reproduced ~~and connected~~ that connects to inputs of the neuronal nets and ~~feeding~~ feeds

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the pixel values of different color channels to the inputs of the

neuronal ~~net~~ <u>nets</u>; and

an image recording device<u>,</u> for generating digital data

of an uncorrected image of a test image provided by the image

reproduction device, ~~and~~ connected to the inputs of the neuronal

net<u>s</u> during the learning process for defining the parameters <u>of</u>

<u>the neuronal nets</u>.

Claim 9 (Canceled).

Claim 10 (Previously Presented): The apparatus of claim 8,

wherein the image forming quality of the image recording device

is superior to the image forming quality of the image

reproduction device.

Claim 11 (Canceled).

Claim 12 (New): A method of defining and at least partially

correcting errors of an image reproduction system, said errors

being deviations between an image of predetermined quality and

its reproduction, such errors being caused by defects in the

image reproduction system and relating to color channels, the

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method comprising the steps of:

feeding image data to be reproduced to N^2 neuronal nets coupling N color channels, with said reproduction occurring by addition of outputs of the N^2 neuronal nets; and

spatially coupling pixel values of the color channels by neuronal networks via space-variant weights.

Claim 13 (New): The method of claim 12, further comprising the steps of:

capturing a reproduced test image of predetermined quality by an image recording device;

utilizing said captured image as a learning pattern;

feeding data representative of an image to be reproduced to the neuronal nets as target data; and

determining parameters of the neuronal nets by a learning process utilizing said learning pattern and said target data.

Claim 14 (New): The method of claim 12, further comprising the step of:

operating an image reproduction device on the basis of the data processed by the neuronal nets, implemented by a

computer or a specific circuit.

Claim 15 (New): The method of claim 12, further comprising
the steps of:

deriving target data for the neuronal nets from
digitized data of an original image to be reproduced;

capturing a reproduced uncorrected test image by an
image recording device; and

training the neuronal nets with data produced by said
image recording device and said target data.

Claim 16 (New): The method of claim 12, further comprising
the step of determining parameters of the neuronal nets from
values derived from an image recording system with a quality of
image formation greater than the quality of the image
reproduction system to be corrected, if the errors to be
corrected are larger than the device-by-device variances of the
image defects to be corrected.